STATUS OF THE CLAIMS

1. **(Previously Presented)** A wireless access system using Carrier Sense Multiple Access for Media Access Control of a host device using a plurality of terminals, the wireless access system comprising:

a master station for converting a first downstream electrical signal received from the host device into a downstream optical signal and transmitting the downstream optical signal via an optical fiber transmission line, and for converting an upstream optical signal received via the optical fiber transmission line into a first upstream electrical signal and transmitting the first upstream electrical signal to the host device;

a plurality of slave stations each for converting a second upstream electrical signal received from any one of the plurality of terminals in a wireless communications area into the upstream optical signal and transmitting the upstream optical signal via the optical fiber transmission line, and for converting the downstream optical signal received via the optical fiber transmission line into a second downstream electrical signal and transmitting the second downstream electrical signal to the wireless communications area; and

an access control section for transmitting the downstream optical signal received from the master station to the plurality of slave stations via the optical fiber transmission line, and transmitting the upstream optical signal transmitted from the any one of the plurality of slave stations to the master station and to all other slave stations of the plurality of slave stations via the optical fiber transmission line.

2. **(Previously Presented)** The wireless access system according to claim 1, wherein the access control section comprises an optical multiplexing/demultiplexing section for allowing the downstream optical signal from the master station to be demultiplexed and transmitting a plurality of demultiplexed optical signals to the plurality of slave stations, and for allowing the upstream optical signal transmitted from the any one of the plurality of slave stations to be demultiplexed and transmitting a plurality of demultiplexed optical signals to the master station and the all other slave stations of the plurality of slave stations.

3. **(Previously Presented)** The wireless access system according to claim 2, wherein the optical multiplexing/demultiplexing section returns the upstream optical signal transmitted from the one of the plurality of slave stations back to the one of the plurality of slave stations.

4. **(Previously Presented)** The wireless access system according to claim 1, wherein

the access control section comprises an optical multiplexing/demultiplexing section for allowing the downstream optical signal transmitted from the master station to be demultiplexed and transmitting a plurality of demultiplexed optical signals to the plurality of slave stations, and outputting the upstream optical signal transmitted from the one of the plurality of slave stations to the master station, and

the master station generates a superimposed optical signal by superimposing the upstream optical signal transmitted from the one of the plurality of slave stations onto the downstream optical signal, and returns the superimposed optical signal back to the optical multiplexing/demultiplexing section.

5-6. **(Canceled)**

7. **(Previously Presented)** The wireless access system according to claim 2, wherein the optical multiplexing/demultiplexing section is an omnidirectional distribution optical multiplexer/demultiplexer including at least an optical port connected to the master station and a plurality of optical ports connected to the plurality of slave stations, respectively, and having formed therein an optical transmission path through which an optical signal transmitted to any one of the optical ports is transmitted to all other optical ports of the plurality of optical ports.

8. **(Previously Presented)** The wireless access system according to claim 3, wherein the optical multiplexing/demultiplexing section is a loopback optical coupler including at least an optical port connected to the master station, a plurality of optical ports connected to the plurality

of slave stations respectively, and two optical ports connected to each other by a loop and having formed therein an optical transmission path through which an optical signal inputted to any one of the optical ports from any one of the plurality of slave stations is outputted to the plurality of slave stations through the two optical ports connected to each other by a loop.

9. **(Previously Presented)** The wireless access system according to claim 3, wherein the optical multiplexing/demultiplexing section is a reflection optical coupler including at least an optical port connected to the master station, a plurality of optical ports connected to the plurality of slave stations respectively, and one optical port processed to be light reflective and having formed therein an optical transmission path through which an optical signal inputted to any one of the optical ports from any one of the plurality of slave stations is transmitted to the plurality of slave stations through the one optical port processed to be light reflective.

10. **(Previously Presented)** The wireless access system according to claim 7, wherein the optical multiplexing/demultiplexing section is comprises a combination of a plurality of optical multiplexing/demultiplexing units each including three optical ports and having formed therein an optical transmission path through which an optical signal inputted to any one of the three optical ports is outputted to all other optical ports.

11. **(Previously Presented)** The wireless access system according to claim 7, wherein the optical multiplexing/demultiplexing section comprises a plurality of optical couplers.

12. **(Previously Presented)** The wireless access system according to claim 10, wherein the optical multiplexing/demultiplexing unit comprises a plurality of optical couplers.

13. **(Previously Presented)** The wireless access system according to claim 7, wherein the optical multiplexing/demultiplexing section comprises an optical waveguide.

14. **(Previously Presented)** The wireless access system according to claim 10, wherein the optical multiplexing/demultiplexing unit comprises an optical waveguide.

15. **(Previously Presented)** The wireless access system according to claim 3, wherein the one of the plurality of slave stations cancels its own upstream optical which has been returned back thereto from the optical multiplexing/demultiplexing section.

16. **(Previously Presented)** The wireless access system according to claim 4, wherein the one of the plurality of slave stations cancels its own upstream optical signal which has been returned back thereto from the optical multiplexing/demultiplexing section.

17. **(Previously Presented)** The wireless access system according to claim 1, wherein the master station comprises:

a first high-frequency amplification section for amplifying the first downstream electrical signal received from the host device;

an optical reception section for converting the upstream optical signal received from the access control section into the first upstream electrical signal;

an optical transmission section for converting the first downstream electrical signal amplified by the first high-frequency amplification section into first downstream optical signal; and

a second high-frequency amplification section for amplifying the first upstream electrical signal converted by the optical reception section.

18. **(Previously Presented)** The wireless access system according to claim 4, wherein the master station comprises:

a first high-frequency amplification section for amplifying the first downstream electrical signal received from the host device;

an optical reception section for converting the upstream optical signal received from the access control section into first upstream electrical signal;

a multiplexing section for allowing the first upstream electrical signal converted by the optical reception section and the first downstream electrical signal amplified by the first high-frequency amplification section to be multiplexed together;

an optical transmission section for converting a multiplexed electrical signal multiplexed by the multiplexing section into an optical signal; and

a second high-frequency amplification section for amplifying the first upstream electrical signal converted by the optical reception section.

19. **(Previously Presented)** The wireless access system according to claim 17, wherein the master station further comprises:

a transmitted/received signal multiplexing/separation section for allowing the first downstream electrical signal transmitted to the first high-frequency amplification section and the first upstream electrical signal transmitted from the second high-frequency amplification section to be multiplexed together onto a transmission line.

20. **(Previously Presented)** The wireless access system according to claim 17, wherein the master station further comprises:

an optical signal multiplexing/separation section for allowing the downstream optical signal transmitted from the optical transmission section and the upstream optical signal received by the optical reception section to be multiplexed together onto the optical fiber transmission line.

21. **(Previously Presented)** The wireless access system according to claim 1, wherein the slave stations each comprise:

an optical reception section for converting the downstream optical signal received from the access control section into the second downstream electrical signal;

a first high-frequency amplification section for amplifying the second upstream electrical signal received from the any one of the plurality of terminals;

a second high-frequency amplification section for amplifying the second downstream electrical signal converted by the optical reception section; and

an optical transmission section for converting the second upstream electrical signal amplified by the first high-frequency amplification section into the upstream optical signal.

22. **(Previously Presented)** The wireless access system according to claim 15, wherein the slave stations each comprise:

an optical reception section for converting the downstream optical signal received from the access control section into the second downstream electrical signal;

a first high-frequency amplification section for amplifying the second upstream electrical signal received from the any one of the plurality of terminals;

a phase inversion section for inverting a phase of the second upstream electrical signal amplified by the first high-frequency amplification section;

a delay section for imparting a predetermined amount of delay to the second upstream electrical signal whose phase has been inverted by the phase inversion section;

a multiplexing section for allowing the second downstream electrical signal converted by the optical reception section and an electrical signal delayed by the delay section to be multiplexed together;

a second high-frequency amplification section for amplifying a multiplexed electrical signal multiplexed by the multiplexing section; and

an optical transmission section for converting the second upstream electrical signal amplified by the first high-frequency amplification section into the upstream optical signal.

23. **(Previously Presented)** The wireless access system according to claim 16, wherein the slave stations each comprise:

an optical reception section for converting the downstream optical signal received from the access control section into the second downstream electrical signal;

a first high-frequency amplification section for amplifying the second upstream

electrical signal received from the any one of the plurality of terminals;

a phase inversion section for inverting a phase of the second upstream electrical signal amplified by the first high-frequency amplification section;

a delay section for imparting a predetermined amount of delay to the second upstream electrical signal whose phase has been inverted by the phase inversion section;

a multiplexing section for allowing the second downstream electrical signal converted by the optical reception section and an electrical signal delayed by the delay section to be multiplexed together;

a second high-frequency amplification section for amplifying a multiplexed electrical signal multiplexed by the multiplexing section; and

an optical transmission section for converting the second upstream electrical signal amplified by the first high-frequency amplification section into upstream optical signal.

24. **(Previously Presented)** The wireless access system according to claim 21, wherein the plurality of slave stations each further comprise an optical signal multiplexing/separation section for allowing the upstream optical signal transmitted from the optical transmission section and the downstream optical signal received by the optical reception section to be multiplexed together onto the optical fiber transmission line.

25. **(Previously Presented)** The wireless access system according to claim 21, wherein the plurality of slave stations each further comprise a transmitted/received signal multiplexing/separation section for allowing the second upstream electrical signal received by the first high-frequency amplification section and the second downstream electrical signal transmitted from the second high-frequency amplification section to be multiplexed together onto a wireless transmission line via one antenna.

26. **(Original)** The wireless access system according to claim 20, wherein the optical signal multiplexing/separation section performs wavelength division multiplexing.

27. **(Original)** The wireless access system according to claim 24, wherein the optical signal multiplexing/separation section performs wavelength division multiplexing.

28. **(Previously Presented)** A wireless access method for a system using Carrier Sense Multiple Access for Media Access Control of a host device via a plurality of terminals, the method comprising:

connecting the host device and the plurality of terminals via a master station, an access control section and a plurality of slave stations;

converting in the master station a first downstream electrical signal received from the host device into a downstream optical signal, and transmitting the downstream optical signal to the access control section through an optical fiber transmission line;

transmitting via an access control section the downstream optical signal received from the master station to the plurality of slave stations through the optical fiber transmission line;

converting in the plurality of slave stations the downstream optical signal received from the access control section into a second downstream electrical signal, and transmitting the second downstream electrical signal to a wireless communications area;

converting in the plurality of slave stations a first upstream electrical signal received from any one of the plurality of terminals in the wireless communications area into an upstream optical signal and transmitting the upstream optical signal to the access control section through the optical fiber transmission line;

transmitting via the access control section the upstream optical signal received from the any one of the plurality of slave stations to the master station and to all other slave stations of the plurality of slave stations through the optical fiber transmission line; and

converting the upstream optical signal received from the access control section into a second upstream electrical signal, and transmitting the second upstream electrical signal to the host device.